

Towards Viksit Bharat@2047 Technological Innovations and Policy Options for Eastern Region



ICAR Research Complex for Eastern Region

**ICAR Parisar, P.O. Bihar Veterinary College
Patna-800 014, Bihar**

ISBN -978-81-954348-4-8

Towards Viksit Bharat@2047: Technological Innovations and Policy Options for Eastern Region

Editors: Abhay Kumar, Anup Das, PC Chandran, SS Mali, DK Singh, P Bhavana, Kumari Shubha, Arti kumari and Sarfaraj Ahmad

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Year of Publication: February, 2025

Citation:

Abhay Kumar, Anup Das, PC Chandran, SS Mali, DK Singh, P Bhavana, Kumari Shubha, Arti kumari and Sarfaraj Ahmad (2024). Towards Viksit Bharat@2047: Technological Innovations and Policy Options for Eastern Region. ICAR-Research Complex for Eastern Region, Patna, India. pp-195. ISBN -978-81-954348-4-8

Published by:

The Director,
ICAR-Research Complex for Eastern Region
ICAR Parisar, Patna- 800014, Bihar, India
Ph: +91-0612-2223962, FAX: +91-0612-2223956
E-mail: director.icar-rcer@icar.gov.in
Website: www.icarrcer.icar.gov.in

Printed at:

VIRTUE ENTERPRISES, Patna, Call : 9304410331, 9383836044

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Strengthening Export Potential of Farmer Producer Organizations (FPO) through One District One Product (ODOP): A Conceptual Model

Period of development: 2019 - 2022

Developers:

Anirban Mukherjee, Shreya Anand, Souvik Ghosh, Ujjwal Kumar, DK Singh, Kumari Shubha, Abhay Kumar

Background:

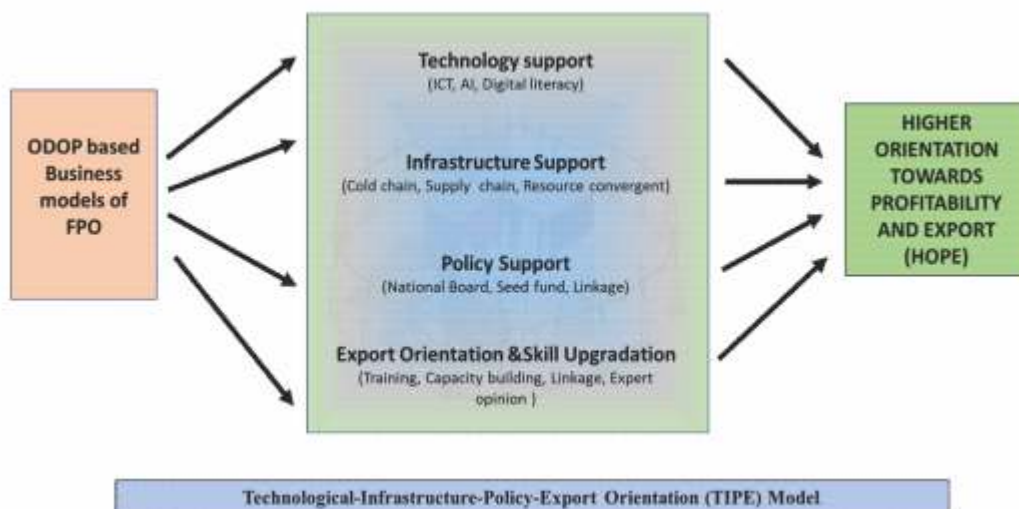
Farmer Producer Organizations (FPOs) play a pivotal role in empowering smallholder farmers by aggregating their produce, improving market access, and enhancing bargaining power. However, their growth and sustainability are often hampered by critical challenges such as limited access to advanced technologies, inadequate infrastructure, insufficient policy support, and constrained export opportunities. Addressing these gaps is imperative to transform FPOs into robust, sustainable business entities capable of thriving in both domestic and international markets. A strategic plan was required so that FPOs can unlock their full potential, ensuring better livelihoods for farmers and contributing significantly to the agricultural value chain.

Description of the technology:

The TIPE model—Technology, Infrastructure, Policy, and Export Orientation—is a comprehensive framework developed under the ICAR-NASF project (2019–2022) to strengthen Farmer Producer Organizations (FPOs) and enhance their profitability and export potential. Aligned with the One District One Product (ODOP) scheme, the TIPE model integrates four key pillars:

- I. Technology Support:** Leveraging cutting-edge technologies such as ICT, AI, and blockchain to boost productivity, reduce costs, and ensure export-quality standards.
- II. Infrastructure Development:** Establishing commodity-specific cold chains and post-harvest facilities to meet global quality and compliance standards.
- III. Policy Backing:** Facilitating streamlined business operations, seed funding, and the creation of a dedicated National Board to support FPOs in navigating export markets.
- IV. Export Orientation & Skill Upgradation:** Providing intensive training and capacity-building programs to equip FPOs with the skills and knowledge required to compete in global trade.

The TIPE model has been successfully applied to key agricultural sectors in Bihar, including Makhana, Litchi, Banana, and Mango. By fostering sustainable growth, enhancing international competitiveness, and ensuring long-term business viability, the model empowers farmers and FPOs to achieve higher profitability and secure a prominent position in global markets.



Process model of Technology–Infrastructure–Policy–Export Orientation (TIPE)

Commercial potential:

The technology can be offered through consultancy services, licensed, or outsourced to the State Agricultural Department, development agencies, FPOs, NGOs, and farmers' groups.

Impact:

The TIPE model has enhanced FPOs' profitability, technology adoption, infrastructure, policy support, and export readiness, ensuring sustainable growth and global market access.

Agro-ecoregions suitability:

Bihar

References:

Anand S, Ghosh S, Mukherjee A. 2023. Strategies for strengthening farmer producer organizations in India based on the One District One Product scheme. *Current Science*, 125(6), 614-622.